



UNITED STATES PATENT AND TRADEMARK OFFICE

SP

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,209	06/24/2003	Morteza Gharib	06618-476003/CIT 3015-D-C	4365
20985	7590	03/17/2005	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			WHITE, DWAYNE J	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/606,209	Applicant(s) GHARIB, MORTEZA	
	Examiner Dwayne J White	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-14 and 16-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-17, 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 2-8, 18-20, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 9-11 and 21-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Amendment***

Applicant's arguments filed 10 January 2005 have been carefully considered but are deemed non-persuasive. Claims 2-14 and 16-27 are pending. Applicant's correction of the minor informality in claim 27 has been noted with appreciation.

Applicant's arguments in regards to prior art reference Luijten et al. have been considered. In regards to claim 2, Applicant argues that Luijten et al. does not disclose causing a laminar outward flow in the fluid. While the Examiner agrees that the reference does not explicitly disclose that feature, it is well known in the pump art that screw type pumps generally produce laminar flow as evidenced by Lotz (4,826,394) wherein the laminar region of the turbomolecular pump is the Hollweck, or screw type, stage of the pump (Column 1, lines 15-26). Therefore, it is the position of the Examiner that the pump of Luijten et al. would produce a laminar flow as claimed. In regards to claim 5, Applicant argues that increasing the force of pumping by increasing the speed of rotation is not disclosed. The Examiner acknowledges that this is not explicitly stated, however, it is the position of the Examiner that since the rotation of the rotor produces the force of pumping, it is obvious that increasing the speed of rotation would also increase the force of pumping. In regards to claim 18, Applicant argues that pumping the fluid by rotating a central shaft in an area of the grooves is not disclosed because the reference teaches pressurizing the fluid. The Examiner respectfully disagrees. The rotor 2 is rotated by a stator 14 and thus pumping the fluid by rotating the central shaft in an area of the grooves. Further, since 13 serves as the rotor of an electric motor and it is known that electric motors

Art Unit: 3745

rotate their shafts through the use of magnets; it is the position of the Examiner that the shaft is magnetically rotated.

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Figure 6 does not meet the quality standards as set forth in 37 CFR 1.84. Specifically, the some of the lines in the new figure are disconnected while other extend passed their intended ending point. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 18-20, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Luijten et al. (4,270,882). Luijten et al. discloses a method of pumping a fluid comprising a causing an outward flow in a fluid between a rotating central shaft 2 and an outer housing 1. The central shaft has an outer surface that is substantially smooth and free of blades and has a constant diameter. A magnetic stator 14 is used to rotate the central shaft. The outer housing

Art Unit: 3745

includes grooves 16 that are tilted in a specified direction (See Figure 3). The central shaft is spaced from the housing by an amount that prevents substantial leakage between the grooves. The method further comprises increasing the force of pumping by increasing the speed of rotation of the first element.

CONCLUSION

Allowable Subject Matter

Claims 12-17, 26 and 27 are allowed.

Claims 9-11 and 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

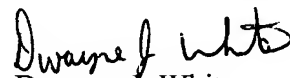
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne J White whose telephone number is (571) 272-4825. The examiner can normally be reached on 7:30 am to 5 pm T-F and alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dwayne J. White
Patent Examiner
Art Unit 3745

DJW


EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

3/15/05